

## IN THE UNITED STATES PATENT AND TRADEMARK OFFICE WASHINGTON, D.C. 20231

Inventor: Zhang et al.

Serial No: 09/357234

Filed:

July 19, 1999

For:

Comp. for Chemical Mechanical

Planarization of Copper,

**Tantalum and Tantalum Nitride** 

Examiner: Brown, Charlotte A.

Art Unit: 1765

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## RESPONSE TO OFFICE ACTION

The Honorable Commissioner of Patents and Trademarks Washington, D.C. 20231

Dear Sir:

This paper responds to the Office Action dated November 30, 2000.

## **IN THE CLAIMS**

Please cancel claims 2-11 and enter the following:

- 1. (Amended) [An etching solution for chemical mechanical planarization of a Cu/Ta/TaN surface] In a chemical mechanical planarization system that includes a Cu/Ta/TaN surface, a replacement single-step etching solution comprising:
  - a) an oxidizing reactant selected from the group consisting of  $H_2O_2$ ,  $HNO_3$  and mixtures thereof; and[,]
  - b) a co-reactant is selected from the group consisting of H<sub>3</sub>PO<sub>4</sub>, H<sub>2</sub>SO<sub>4</sub>, HNO<sub>3</sub>, oxalic acid, acetic acid, organic acids and mixtures thereof[; and,